

195 Commerce Way Suite E Portsmouth, New Hampshire 03801 603-436-5111 Fax 603-430-2151 800-929-9906 www.analyticslab.com

September 22, 2010

Mr. Herb Kodis Maine Environmental Laboratory, Inc. PO Box 1107 Yarmouth, ME 04096-1107

RE:

Analytical Results Case Narrative SME 963-10 Analytics #67785

Dear Mr. Kodis:

Enclosed please find the analytical report for samples collected from the above-mentioned project. The attached Cover Page lists the sample IDs, Lab tracking numbers and collection dates for the samples included in this deliverable.

Samples were analyzed for Polychlorinated Biphenyls (PCBs) by EPA 8082.

Unless otherwise noted in the Non-conformance Summary listed below, all of the quality control (QC) criteria including initial calibration, calibration verification, surrogate recovery, holding time and method accuracy/precision for these analyses were within acceptable limits.

This Level II package has been assembled in the following order:

Case Narrative/Non-Conformance Summary
Sample Log Sheet - Cover Page
PAH Form I Data Sheet for Samples and Blanks
Chromatograms
PAH Form 3 MS/MSD (LCS) Recoveries
PCB Form I Data Sheet for Samples and Blanks
Chromatograms
PCB Form 3 MS/MSD (LCS) Recoveries
Chain of Custody (COC) Forms
Sample Receipt Checklist

QC NON-CONFORMANCE SUMMARY

Sample Receipt:

No exceptions.

PCBs by EPA 8082:

No results are reported below the quantitation limit.

The closing continuing calibration standard had low recovery for Decachlorobiphenyl surrogate on column #2. Column #1 was in control for all analytes. Surrogate results were reported off of column #1 without qualification.

If you have any questions or I can be of further assistance please do not hesitate to contact me.

Sincerely

ANALYTICS Environmental Laboratory, LLC

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Stephen Knollmeyer Laboratory Director



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Mr. Herb Kodis Maine Environmental Laboratory, Inc. PO Box 1107 Yarmouth, ME 04096-1107 Report Number: 67785

Revision: Rev. 0

Re: SME 963-10

Enclosed are the results of the analyses on your sample(s). Samples were received on 15 September 2010 and analyzed for the tests listed. Samples were received in acceptable condition, with the exceptions noted below or on the chain of custody. These results pertain to samples as received by the laboratory and for the analytical tests requested on the chain of custody. The results reported herein conform to the most current NELAC standards, where applicable, unless otherwise narrated in the body of the report. Please see individual reports for specific methodologies and references.

<u>Lab Number</u>	Sample Date	Station Location	<u>Analysis</u>	Comments
67785-1	09/07/10	BK-B-402 (0-2')	Electronic Data Deliverable	
	09/07/10	BK-B-402 (0-2')	EPA 8082 (PCBs only)	

Sample Receipt Exceptions: None

Analytics Environmental Laboratory is certified by the states of New Hampshire, Maine, Massachusetts, Connecticut, Rhode Island, Virginia, Maryland, and is accredited by the Department of Defense (DOD) ELAP program. A list of actual certified parameters is available upon request.

If you have any questions on these results, please do not hesitate to contact us.

Authorized signature

Stephen L. Knollmeyer Lab. Director

Date

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Surrogate Compound Limits

	Matrix: Units:	Aqueous % Recovery	Solid % Recovery	Method
Volatile Organic Compounds - D	rinking Wa	ter		
1,4-Difluorobenzene		70-130		EPA 524.2
Bromofluorobenzene		70-130		2171 72 1.2
1,2-Dichlorobenzene-d4		70-130		
Volatile Organic Compounds				
1,2-Dichloroethane-d4		70-120	70-120	EPA 624/8260B
Toluene-d8		85-120	85-120	
Bromofluorobenzene		75-120	75-120	
Semi-Volatile Organic Compound	is			
2-Fluorophenol		20-110	35-105	EPA 625/8270C
d5-Phenol		15-110	40-100	
d5-nitrobenzene		40-110	35-100	
2-Fluorobiphenyl		50-110	45-105	
2,4,6-Tribromophenol		40-110	40-125	
d14-p-terphenyl		50-130	30-125	
PAH's by SIM				
d5-nitrobenzene		21-110	35-110	EPA 8270C
2-Fluorobiphenyl		36-121	45-105	
d14-p-terphenyl		33-141	30-125	
Pesticides and PCBs				
2,4,5,6-Tetrachloro-m-xylene (TCX))	46-122	40-130	EPA 608/8082
Decachlorobiphenyl (DCB)		40-135	40-130	
Herbicides				
Dichloroacetic acid (DCAA)		30-150	30-150	
Gasoline Range Organics/TPH Ga	soline			
Trifluorotoluene TFT (FID)		60-140	60-140	MEDEP 4217/EPA 8015
Bromofluorobenzene (BFB) (FID)		60-140	60-140	
Trifluorotoluene TFT (PID)		60-140	60-140	
Bromofluorobenzene (BFB) (PID)		60-140	60-140	
Diesel Range Organics/TPH Diesel				
m-terphenyl		60-140	60-140	MEDEP 4125/EPA 8015/CT ETPH
Volatile Petroleum Hydrocarbons				
2,5-Dibromotoluene (PID)		70-130	70-130	MADEP VPH May 2004 Rev1.1
2,5-Dibromotoluene (FID)		70-130	70-130	·
Extracatable Petroleum Hydrocarb	ons			
1-chloro-octadecane (aliphatic)		40-140	40-140	MADEP EPH May 2004 Rev1.1
o-Terphenyl (aromatic)		40-140	40-140	ř
2-Fluorobiphenyl (Fractionation)		40-140	40-140	
2-Bromonaphthalene (fractionation)		40-140	40-140	



PCB DATA SUMMARIES



SME 963-10

Mr. Herb Kodis Maine Environmental Laboratory, Inc. PO Box 1107

CLIENT SAMPLE ID

Yarmouth, ME 04096-1107

September 22, 2010

SAMPLE DATA

Lab Sample ID:

B091610PSOX RR

Matrix:

Soil

Percent Solid:

N/A

Dilution Factor:

1.0

Collection Date:

Lab Receipt Date:

Extraction Date:

Analysis Date:

09/16/10 09/20/10

Field Sample ID: Lab QC

Project Name:

Project Number:

PCB ANALYTICAL RESULTS

COMPOUND	Quantitation Limit μg/kg	Results μg/kg
PCB-1016	33	U
PCB-1221	33	U
PCB-1232	33	U
PCB-1242	33	U
PCB-1248	33	U
PCB-1254	33	U
PCB-1260	33	U

Surrogate Standard Recovery

2,4,5,6-Tetrachloro-m-xylene

101 %

Decachlorobiphenyl

64 %

U=Undetected J=Estimated E=Exceeds Calibration Range B=Detected in

METHODOLOGY: Sample analysis conducted according to Test Methods for Evaluating Solid Waste, SW-846 Method 8082.

Sample preparation conducted according to Test Methods for Evaluating Solid Waste, SW-846 Method 3540C.

COMMENTS: Results are expressed on a dry weight basis.

PCB Report

Authorized signature Mullull

Data Path : C:\msdchem\1\DATA\092010-M\

Data File: M30334B.D

Signal(s): Signal #1: ECD1A.ch Signal #2: ECD2B.ch

Acq On : 20 Sep 2010 2:50 pm

Operator : JK

Sample : B091610PSOX,RR2,,A/C

Misc : SOIL

ALS Vial : 6 Sample Multiplier: 1

Integration File signal 1: events.e Integration File signal 2: events2.e

Quant Time: Sep 21 12:17:23 2010

Quant Method: C:\msdchem\1\METHODS\PCB091410.M

Quant Title : SW-846 METHOD 8082 Aroclor 1016/1260/1254

QLast Update : Tue Sep 14 15:47:42 2010

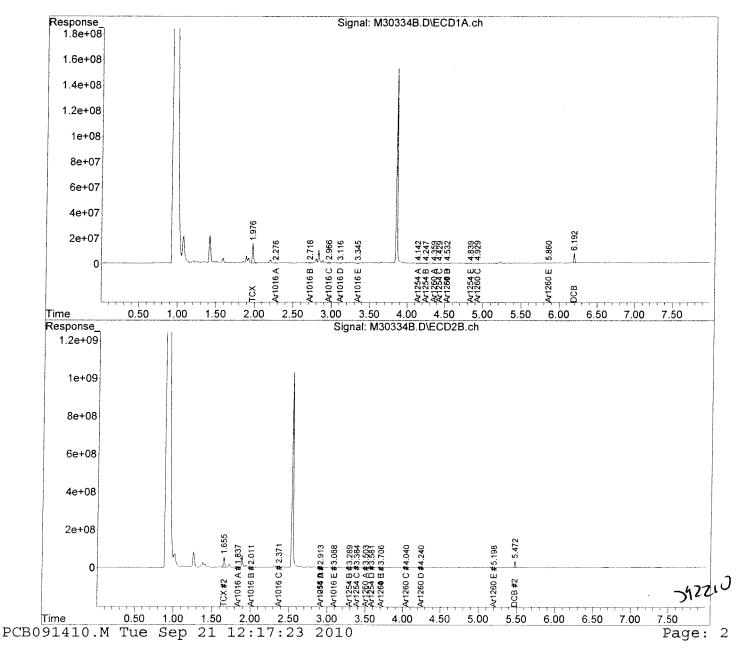
Response via : Initial Calibration

Integrator: ChemStation

Volume Inj. : 2 uL

Signal #1 Phase : STX-CLPPesticides Signal #2 Phase: STX-CLPPesticides

Signal #1 Info : 30 m x 0.25mm x 0 Signal #2 Info : 30 m x 0.25mm x 0.25 um





SME 963-10

BK-B-402 (0-2')

Mr. Herb Kodis

Maine Environmental Laboratory, Inc.

CLIENT SAMPLE ID

PO Box 1107

Project Name:

Project Number:

Field Sample ID:

Yarmouth, ME 04096-1107

September 22, 2010

SAMPLE DATA

Lab Sample ID:

67785-1 RR

Matrix:

Solid

Percent Solid:

92

Dilution Factor:

1.0

Collection Date:

09/07/10

Lab Receipt Date:

09/15/10

Extraction Date:

09/16/10

Analysis Date:

09/20/10

PCB	ANAL	YTICAL	RESUL	TS

COMPOUND	Quantitation Limit µg/kg	Results μg/kg
PCB-1016	33	U
PCB-1221	33	U
PCB-1232	33	U
PCB-1242	33	U
PCB-1248	33	U
PCB-1254	33	U
PCB-1260	33	U

Surrogate Standard Recovery

2,4,5,6-Tetrachloro-m-xylene

83 %

Decachlorobiphenyl

62 %

U=Undetected J=Estimated E=Exceeds Calibration Range B=Detected in

METHODOLOGY: Sample analysis conducted according to Test Methods for Evaluating Solid Waste, SW-846 Method 8082.

Sample preparation conducted according to Test Methods for Evaluating Solid Waste, SW-846 Method 3540C.

COMMENTS:

Results are expressed on a dry weight basis.

PCB Report

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\DATA\092010-M\

Data File: M30338.D

Signal(s): Signal #1: ECD1A.ch Signal #2: ECD2B.ch

Acq On : 20 Sep 2010 3:31 pm

: JK Operator

Sample : 67785-1,RR,,A/C

Misc : SOIL

ALS Vial : 20 Sample Multiplier: 1

Integration File signal 1: events.e Integration File signal 2: events2.e

Quant Time: Sep 21 12:17:32 2010

Quant Method : C:\msdchem\1\METHODS\PCB091410.M

Quant Title : SW-846 METHOD 8082 Aroclor 1016/1260/1254

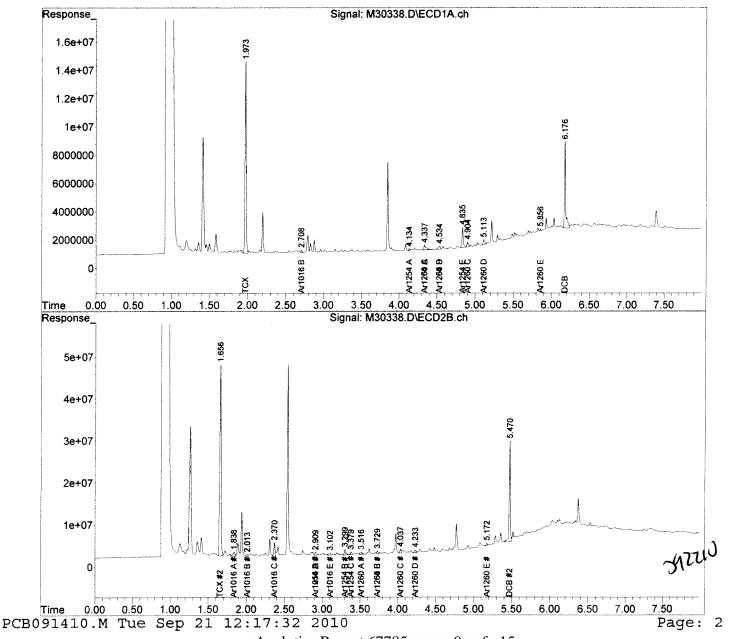
QLast Update: Tue Sep 14 15:47:42 2010 Response via: Initial Calibration

Integrator: ChemStation

Volume Inj. : 2 uL

Signal #1 Phase : STX-CLPPesticides Signal #2 Phase: STX-CLPPesticides

Signal #1 Info : 30 m \times 0.25mm \times 0 Signal #2 Info : 30 m \times 0.25mm \times 0.25 um



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PCB QC FORMS

PCB SOIL LABORATORY CONTROL SAMPLE/DUPLICATE PERCENT RECOVERY

Instrument ID: M

GC Column #1: STX-CLPesticides 1

SDG: 67785

Column ID: 0.25 mm

Non-spiked sample: B091610PSOX,RR,,,A/C

GC Column #2: STX-CLPesticides II

Spike: L091610PSOX,RR,,A/C

Column 1D: 0.25 mm

Spike duplicate: LD091610PSOX,RR,,A/C

	LCS SPIKE	LCSD SPIKE	LOWER	UPPER	RPD	NON-SPIKE	SPIKE	SPIKE		SPIKE DUP	SPIKE DUF	,		
COMPOUND	ADDED (ug/kg)	ADDED (ug/kg)	LIMIT	LIMIT	LIMIT	RESULT (ug/kg)	RESULT (ug/kg)	% REC	#	RESULT (ug/kg)	% REC	#	RPD	#
PCB 1016	200	200	65	140	30	0	233	116		223	111		4.3	
PCB 1260	200	200	60	130	30	0	208	104		202	101		2.9	
PCB 1016 #2	200	200	65	140	30	0	242	121		233	116		3.8	
PCB 1260 #2	200	200	60	130	30	0	221	111		218	109		1.3	

- # Column to be used to flag recovery and RPD values outside of QC limits
- * Values outside QC limits

LCS/LCSD spike added values have been weight adjusted.

Non-spike result of "0" used in place of "U" to allow calculation of spike recovery.

Comments:			

PCB SOIL MATRIX SPIKE/DUPLICATE PERCENT RECOVERY

Instrument ID: M

GC Column #1: STX-CLPesticides I

Non-spiked sample: 67785-1,RR,,A/C

Column ID: 0.25 mm

SDG: 67785

GC Column #2: STX-CLPesticides II

Spike: 67785-1,MS,RR,,A/C

Column 1D: 0.25 mm

Spike duplicate: 67785-1,MSD,RR,,A/C

	LCS SPIKE	LCSD SPIKE	LOWER	UPPER	RPD	NON-SPIKE	SPIKE	SPIKE		SPIKE DUP	SPIKE DUP			
COMPOUND	ADDED (ug/kg)	ADDED (ug/kg)	LIMIT	LIMIT	LIMIT	RESULT (ug/kg)	RESULT (ug/kg)	% REC	#	RESULT (ug/kg)	% REC	#	RPD	#
PCB 1016	215	213	65	140	30	0	205	96		233	109		12.5	
PCB 1260	215	213	60	130	30	0	206	96		198	93		3.9	
PCB 1016 #2	215	213	65	140	30	0	245	114		269	126		9.2	
PCB 1260 #2	215	213	60	130	30	0	166	77		179	84		7.8	

Column to be used to flag recovery and RPD values outside of QC limits

LCS/LCSD spike added values have been weight adjusted.

Non-spike result of "0" used in place of "U" to allow calculation of spike recovery.

Comments:	
	_

^{*} Values outside QC limits



CHAIN OF CUSTODIES

				AEL
MAINE ENVIRONMENTAL	LABORATORY. C	hain of Custody	ANALYSES	LABORATORY REPORT #
One Main Street Yarmouth, Maine 04096-6716	(207) 846-656	fax: (207) 846-9066		
	e-mail: melab@maine.rr.com			Delivered by
PHOJECT MANAGER H. Kod's	TELEPHONE	FAX # / E-MAIL		
COMPANY	PURCHASE ORDER # / BILL TO			
ADDRESS			×6	TURNAROUND REQUEST
PROJECT NAME SME 963-10	SAMPLER NAME		PS/m	Priority (SURCHARCE)
SAMPLE	FIELD SAMPLE SAMPLE SAMPLE SAMPLE	SAMPLING	90	Quote # MEL 3/20/01-84
Analy	COULTYPE COULTY AES NO MATRIX	PRESERVED DATE TIME	Dd	LABORATORY IDENTIFICATION/ SUBCONTRACTOR
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Sallipies received preserved RELINQUISHED BY SAMPLER	☐ yes ☐ no ☐ N/A	<i>(</i>		
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OIGHED BT.		TIME	MECEIVED BY LABORATORY	agajisho
COC-04 Cala Cohu 11.0				

ANALYTICS SAMPLE RECEIPT CHECKLIST



AEL LAB#: 67785	COOLER NUMBER:	69	
CLIENT: MEL	NUMBER OF COOLERS:	- Maria Maryan I and Baran	
PROJECT: SING 963-16	DATE RECEIVED:	9/15/10	
A: PRELIMINARY EXAMINATION:	DATE COOLER OPENED:	9/15/10	
1. Cooler received by(initials):	Date Received:	9/15/10	
2. Circle one: Hand delivered	Shipped		
3. Did cooler come with a shipping slip?	Y	N/A	
3a. Enter carrier name and airbill number here:			
4. Were custody seals on the outside of cooler? How many & where: Seal Date:	Y Seal Name:	N	
5. Did the custody seals arrive unbroken and intact upon arrival?	Y	N/A	
6. COC#: \(\mathcal{D}/\mathcal{A}\)			
7. Were Custody papers filled out properly (ink, signed, etc)?	(\overline{Y})	N	
8. Were custody papers sealed in a plastic bag?	(Y)	N	
9. Did you sign the COC in the appropriate place?	Ŷ	N	
10. Was the project identifiable from the COC papers?	Ŷ	N	
11. Was enough ice used to chill the cooler?	Temp. of cooler:	3°	
B. Log-In: Date samples were logged in: Street 9/16/10	Ву:		
12. Type of packing in cooler(bybble wrap, pypcorn)	Y	N	
13. Were all bottles sealed in separate plastic bags?	Y	N	
14. Did all bottles arrive unbroken and were labels in good condition?	$(\widehat{\mathbf{Y}})$	N	
15. Were all bottle labels complete(ID,Date,time.etc.)	Y	(N) - No time	on label
16. Did all bottle labels agree with custody papers?	(Y)	N	
17. Were the correct containers used for the tests indicated:	Ŷ	N	
18. Were samples received at the correct pH?	Y	NA	
19. Was sufficient amount of sample sent for the tests indicated?	(Y)	N	
20. Were bubbles absent in VOA samples?	Y	N/A-	
If NO, List Sample ID's and Lab #s:			
21. Laboratory labeling verified by (initials):		3-16-10	